DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES Office of Structural Materials Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453 (707) 649-5493



Procedure Qualification Record (PQR) Test

Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

01.28 File #:

WELDING INSPECTION REPORT

Resident Engineer: Pursell, Gary **Report No:** WIR-000179 Address: 333 Burma Road **Date Inspected:** 11-May-2007

City: Oakland, CA 94607

34-0006

OSM Arrival Time: 630 **Project Name:** SAS Superstructure **OSM Departure Time:** 1500 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: American Bridge/Fluor Enterprises, a JV **Location:** Benicia, CA

CWI Name: Michael Johnson **CWI Present:** Yes No **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A Yes N/A **Electrode to specification:** No **Weld Procedures Followed:** Yes No N/A N/A N/A **Qualified Welders:** Yes No **Verified Joint Fit-up:** Yes No N/A Yes No N/A **Approved Drawings:** Yes No **Approved WPS:**

Delayed / Cancelled: Yes No N/A

Component:

Summary of Items Observed:

Bridge No:

Caltrans Quality Assurance (QA) Inspector Mary Madere is present at the Ironworkers Apprenticeship Training Facility as requested by ABF for the continuing purpose of witnessing Procedure Qualification Record tests. On this date, the QA Inspector observed the following personnel present: Smith-Emery Company's Quality Control (QC) Representative Certified Welding Inspector (CWI) Mr. Michael Johnson, ABF Representatives Mr. Tommy Gibson and Mr. Rick Clayborn, Bay Arc Representative Mr. Rich Deveau and welder Mr. Dan Gordon.

The QA Inspector witnessed the completion of the first attempt of a minimum heat input Procedure Qualification Record (PQR) Test identified as ABF-PQR-016-2. This PQR test is being attempted using the flux-cored arc welding (FCAW-G) process with gas shielding and a mechanical device that travels on a magnetic track. Welder Mr. Dan Gordon completed eight weld passes on this date. For specific welding parameters recorded during this PQR and digital photographs that support these observations, see Caltrans Welding Witness Report, TL-6032 generated on this date.

The QA Inspector witnessed the beginning of the first attempt of a maximum heat input Procedure Qualification Record (PQR) Test identified as ABF-PQR-016-1. This PQR test is being attempted using the flux-cored arc welding (FCAW-G) process with gas shielding and a mechanical device that travels on a magnetic track. Welder Mr. Dan Gordon deposited the root pass only on this date. For specific welding parameters recorded during this PQR and digital photographs that support these observations, see Caltrans Welding Witness Report, TL-6032 generated on this date.

PQR Test Summary

WELDING INSPECTION REPORT

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Based on the Caltrans QA Inspectors observations starting from the first date of these PQR Test attempts on March 26, 2007, sixteen PQRs have been attempted. The first seven PQR test plates were found to be visually non-compliant by Quality Control. Eight of the PQR test plates complied with the welding parameter and visual requirements but did not comply with the requirements of radiographic testing (RT). One PQR test plate is currently pending radiographic testing (RT). As of this date, there have been no PQR tests found to be compliant with all of the requirements of the contract documents.

Summary of Conversations:

Quality Control Representative Mr. Michael Johnson informed the QA Inspector that he has performed Ultrasonic Testing (UT) on the PQR Test plate identified as ABF-PQR-016-2 for information purposes only. After UT was complete, Mr. Johnson informed the QA Inspector that he has detected indications in the root area of the test plate, with an indication rating of approximately +12 db's.

Quality Control Representative Mr. Michael Johnson informed the QA Inspector that Mr. Gordon would complete the PQR Test identified as ABF-PQR-016-1 on Monday, May 14, 2007.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Mazen Wahbeh, (818) 292-0659, who represents the Office of Structural Materials for your project.

Inspected By:	Madere, Mary	Quality Assurance Inspector
Reviewed By:	Cuellar,Robert	QA Reviewer